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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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01/23/2001

Alan Tura

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7590

10/07/2004

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Youngstown, OH 44514

EXAMINER

CHANG, AUDREY Y

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/766,930

Applicant(s)

TURA, ALAN

Examiner

Audrey Y. Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remark

- This Office Action is in response to applicant's amendment filed on July 14, 2004, which has been entered into the file.
- By this amendment, the applicant has amended claims 1-5 and 7-8.
- Claims 1-8 remain pending in this application.
- The oath and declaration is not defective in light of applicant's amendment.
- The rejection to claim 8 under 35 USC 112, first paragraph, set forth in the previous Office Action is withdrawn in response to applicant's amendment.

Response to Amendment

1. The amendment filed on July 14, 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material, which is not supported by the original disclosure is as follows: **claim 1 has been amended** to include the phrase "non-graphic design of primary base colors". The applicant is respectfully reminded if the graphic designs of primary colors are in offset registration with respect to non-graphic design indicia of *primary* base colors then three dimensional effect may not occur.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The reasons for rejection based on newly added matters are set forth in the paragraph above.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-8 have been extensively amended either directly or indirectly, new grounds of rejections are therefore necessitated.

The phrase “said non-graphical design indicia of primary base colors”, and the phrase “said graphic indicia registration of primary colors and non-primary base colors” recited in claim 1 are confusing and indefinite since they each lacks proper antecedent basis from earlier part of the claim.

Also it is not clear if the phrase “composite graphic indicia” and the phrase “composite graphic indicia registration” recited in the claims are the same or not. If they are the same please adopt just one phrase, if they are not please specify what is the difference between the two.

It is also not clear what is this “non-graphic design indicia of primary base color”. This makes the phrase “b” in claim 1 very vague and indefinite.

The phrase “viewing portions of composite graphic indicia from a central viewing position not in central alignment therewith to impart angular inclination viewing angles to said composite graphic indicia registration portions in non-central alignment with said central viewing position” recited in claim 1 is

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very confusing and indefinite. It is really not clear if this phrase is referred to a “*portions* of the composite graphic indicia” or is referred to “*viewing positions*”. It is not clear what is considered to be “not in central alignment therewith”? What is not in central alignment? The central alignment is defined with respect to what? Also if one views from a central viewing position, how can a *multiple* viewing angles be imparted? One direction of viewing has only one viewing angle. It is not clear if this phrase really means that “if one views the composite graphic indicia from a normal viewing position, (normal means in perpendicular to a plane parallel to the observer), then the portions of the composite graphic indicia arranged not in line with the normal direction will appear to be angularly inclined with respect to the normal direction”. If this is the case, then the **corresponding structure**, namely having different primary color graphic design being placed at positions not in line with the normal line and in angular inclination, needed to be included in the claims to support the claims.

The phrase “viewing portions of said composite graphic indicia registration of said primary colors appearing in dimensional relationship to said non-primary and said primary colors in central alignment with said central aligned viewing position” in claim 1 is completely confusing and vague. How can the **colors** be “aligned with central aligned viewing position”? It is not clear if this phrase means the arrangement of different graphic design or not?

Claim 4 with the *amendment* is very confusing. Again it is not clear with respect to what is the “central alignment therewith” defined. Also it is not clear how could the “viewing portions”, (not clear if this means the portions on the indicia or the viewing positions of the observer), “imparts angular inclination viewing of primary graphic indicia colors imparting a wrap a around graphic visualization effect”? The applicant is respectfully noted that the “portions of the graphic indicia” DO NOT impart any inclination viewing or any wrap around visualization effect, etc. Rather is the result of the arrangements of the primary colored and non-primary colored graphic indicia against a black background IN

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COMBINATION with the proper colored vision adds. The phrases (d), (e) in claim 1 and phrases in claim 4 are all confusing and in errors.

Applicant is respectfully reminded to clarify **ALL** of the errors, confusions and discrepancies of the claims to make the claims in comply with the requirements of 35 USC 112, first and second paragraphs.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issues to Burton (PN. 6,608,718).**

Burton teaches a method and system for creating *three-dimensional visualization* of images wherein a set of specific *color and geometric patterns* are formed on a substantially *black background*. The black background serves as the *non-primary base color*, which as taught by Burton can be the wall background of a room. The specific color and geometric patterns may include different color portions (10-14 in Figure 1 or 20-28 in Figure 2, or 34, 36 and 38 of Figure 3). Burton teaches the color portions may include *red, blue and green portions* (14, 10 or 28, 20, 22), which are of *primary colors* and *yellow portions* and *orange portions of non-primary portions*, wherein the colored portions can be overlapped with each other, (please see Figure 3), and be formed on the black background, ***as indicated in Figures 1-3***. Burton teaches that by illuminating the color portions and the background with ultraviolet light and by viewing the color portions with *a pair of stereoscopic lenses* that *selectively* diffract light based on the

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wavelength, the different color portions, which together forms a *composite* color pattern or graphic indicia, will appear to be “floating” in the space as against the black background at different spatial positions and elevation, (please see Figure 2A). That is to say the composite color pattern with different color portions appear in *dimensional relationship* with respect to the black background and with respect to each other, which therefore creates depth or stereoscopic illusion to the viewer, (please see columns 3-4).

This reference has met all the limitations of the claims with the exception that it does not teach explicitly that the black background and the color portions are applied on a *curvilinear* surface. However Burton teaches explicitly that the optical three-dimensional effect is the **result** of having different colored objects or portions being positioned on a black background so that when illuminating the colored objects or portions with ultraviolet light the viewer will see the colored objects or portions free-floating against the black background when viewed through the stereoscopic lenses, (please see column 3). It is implicitly true that the optical three-dimensional effect does not rely on the *geometric* shape of the background surface but on the **black** color nature of the background surface. Burton does teach that the colored portions or patterns, which includes both primary color portions and non-primary color portions, may assume different geometric shapes and be portions of a figures with curved structure, (please see Figures 1-4). It would then have been obvious to one skilled in the art to apply the same method to use a *curved* background surface for the benefit of allowing the three-dimensional image method being applied to a curved background surface as desired. Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Madham, 2 USPQ2d 1647 (1987).

This reference also does not teach *explicitly* that the black background and each different color portion or geometric pattern forms a composite graphic design indicia. However Burton does teach that

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the colored portions or patterns, which includes both primary color portions and *non-primary color* portions, may assume different geometric shapes and be portions of a figures, i.e. forms a composite graphic indicia, (please see Figures 1-4). As mentioned in the paragraphs above, the critical factor to achieve the optical three-dimensional effect is to have different *colored* portions applied on a black background and viewed through stereoscopic lenses, i.e. to create *color contrast*. The nature of the colored portions to be graphical or to assume any geometric shapes become an issue of obvious matters of design choices to one skilled in the art for the benefit of creating three-dimensional images of personal preference.

With regard to features concerning the “central alignment” and “non-central alignment” recited in the claims, they are not well defined for the reasons stated above and therefore can only be examined briefly. It is explicitly demonstrated by Figure 2A, that when an observer wearing the stereoscopic lenses looks toward the composite graphic indicia, (including different colored portions 20A to 28A), the color portions that are not in central alignment with the viewing direction (indicated by the arrow under the glasses), will appear to be in multiple angular inclinations with respect to the central alignment direction.

With regard to claim 3, Burton teaches that the primary colors include red, blue and green colors.

With regard to claims 4 and 5, Burton teaches that the color portions or patterns may appear to have staircase relationship, which therefore creates an angular inclination either when the observer wearing the stereoscopic lenses looking along the alignment or not along the alignment direction. The angular inclination is a result of the wavelength depended diffraction of the stereoscopic lenses, and not the result of the direction of viewing . In a different embodiment, Burton teaches that the different color regions are formed on a three dimensional objects with different color layers which will introduce even more angular inclination when viewed by the observer due to the geometric shape of the object, (please see Figure 3).

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With regard to claim 6, Burton teaches that the colored portions or objects with *fluorescent* color, such as fluorescent red color will make the three-dimensional effect even more sharply contrast against the black background, (please see column 3, lines 40-51, and column 4, lines 1-32).

With regard to claim 8, Burton teaches the stereoscopic lenses may include prisms, (please see column 1, lines 24-26).

8. **Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Burton as applied to claim 1 above, and further in view of the patent issued to Kawai et al (PN. 6,224,964).**

The method for creating optical three-dimensional image taught by **Burton** as described for claim 1 above has met all the limitations of the claims with the exception that it does not teach explicitly that the color portions are applied by monolithic design transfer sheets of pre-printed multiple color registration. However using monolithic design transfer sheet with pre-printed multiple color registration to create colored pattern is very well known in the art as demonstrated by the teachings of **Kawai et al**. **Kawai** teaches that a monolithic thermal transfer sheet of multiple color registrations (1, Figure 1) is used to transfer color pattern onto a substrate. It would then have been obvious to apply the teachings of **Kawai et al** to use the standard monolithic transfer sheet to form the colored patterns of **Burton** for the benefit of making the colored patterns with single application process, to save time and cost.

Double Patenting

9. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

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A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

10. **Claims 1-8 are provisionally rejected** under 35 U.S.C. 101 as claiming the **same invention** as that of **claims 1-8** of copending Application No. **10/072,328**. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Response to Arguments

6. Applicant's arguments filed July 14, 2004 have been fully considered but they are not persuasive. The newly amended claims have been fully considered and they are rejected for the reasons stated above.

7. Applicant's arguments are mainly based on the newly amended claims and features they have been addressed in the paragraphs above. The applicant is respectfully noted that Figure 3 of Burton reference clearly shown the graphic indicia of primary colors and non-primary color are in overlapping relationship. The are also in overlapping relationship with respect to the black background or wall.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Audrey Y. Chang whose telephone number is 571-272-2309. The examiner can normally be reached on Monday-Friday (8:00-4:30), alternative Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A. Chang, Ph.D.

Audrey Y. Chang
Primary Examiner
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